

Listing of Claims:

Claim 1 (currently amended) A vacuum holding device with apparatus for producing a vacuum, wherein

- the vacuum holding device and the apparatus for producing a vacuum are constructed in two parts and are detachable connected substantially gastight by positioning against each other,

wherein the vacuum holding device comprises:

- a vacuum chamber which is open in the direction of a contact surface,
- an outwardly directed opening as the end of a connection from the vacuum chamber to an external environment,
- a valve which ensures gastight closing and opening of the connection between the vacuum chamber and the external environment
- means for producing a detachable substantially gastight coupling between the outwardly directed opening and the apparatus to produce a vacuum,
- the vacuum holding device comprises a seal which seals the vacuum chamber gastight against the contact surface towards the outside,

wherein the apparatus for producing a vacuum comprises

- a suction piston and a piston suction pipe wherein the suction pipe has a first opening at the beginning of the suction path, and
- the valve of the vacuum holding device is liftable from his seat by moving the suction piston in the direction from the first to the second opening and
- a second opening at the end of the suction path which is fully passable by the suction piston so that when the second opening is fully passed by the suction

piston ambient air penetrates in one stroke into the piston suction pipe to close
the valve of the vacuum holding device.

Claim 2 (previously amended) The vacuum holding device according to claim 1,
wherein the valve is constructed as a form selected from the group consisting of
substantially conical, spherical and hemispherical.

Claim 3 (previously amended) The vacuum holding device according to claim 1 wherein
the connection between the vacuum chamber and the external environment has a form
selected from the group consisting of conical, spherical and hemispherical bearing
surface to accommodate the valve.

Claim 4 (previously amended) The vacuum holding device according to claim 1 wherein
at least in the regions in contact with the bearing surface, the valve consists of a rubber
elastic material.

Claim 5 (previously amended) The vacuum holding device according to claim 1 wherein
one part of the means for producing a detachable, substantially gastight coupling from an
upwardly directed opening is a surface.

Claim 6 (previously amended) The vacuum holding device according to claim 1 wherein
the detachable, substantially gastight coupling is formed by a rubber seal between the
surface and attachment of the device to produce a vacuum.

Claim 7 (previously amended) The vacuum holding device according to claim 1 wherein the surface for attaching the device to produce a vacuum is directed to the contact surface of the vacuum holding device.

Claim 8 (previously amended) The vacuum holding device according to claim 1 wherein the vacuum holding device has a holding receptacle for an equipment holder.

Claim 9 (currently amended) A method for securing a vacuum holding device with an apparatus for producing a vacuum according to claim 1 to a contact surface comprising:

- positioning the vacuum holding device on a contact surface,
- producing a detachable, substantially gastight coupling between the outwardly directed opening of the vacuum holding device and a piston suction pipe,
- producing a vacuum in a vacuum chamber by ~~withdrawing~~ moving a suction piston in the direction from a first opening at the beginning of the suction path to a second opening at the end of the suction path and opening the valve of the vacuum holding device by the movement of the suction piston and
- further withdrawing the suction piston from the piston suction pipe until the suction piston passes ~~an upper~~ the second opening so that when the second opening is fully passed by the suction piston ambient air penetrates in one go into the piston suction pipe to close the valve of the vacuum holding device and
- removing the apparatus for producing a vacuum.

Claim 10 (currently amended) A vacuum holding device, wherein the vacuum holding device has:

- a vacuum chamber which is open in the direction of the contact surface,
- an opening as the end of a connection between the vacuum chamber and the external environment,
- a valve which ensures gastight closing and opening of the connection between the vacuum chamber and the external environment and
- means for producing a detachable substantially gastight coupling between the outwardly directed opening and an apparatus for producing a vacuum,
- the valve is constructed as a form selected from the group consisting of substantially conical, spherical or hemispherical and
- the connection between the vacuum chamber and the external environment has a form selected from the group consisting of conical, spherical and hemispherical bearing surface to accommodate the valve,
- the vacuum holding device has a seal which closes the vacuum chamber gastight towards the outside against the contact surface, and
- the valve extends as a strip or rod ~~with a support~~ wherein at the end of the strip or rod there is at least one support in the form of at least one member of the group consisting of pin and wedge.

Claim 11 (cancelled)

Claim 12 (currently amended) The vacuum holding device according to claim 10 wherein the extension of the valve is elastic to hold the valve in the bearing surface.

Claim 13 (previously amended) The vacuum holding device according to claim 10 wherein the seal is a flat seal made of elastic material.

Claim 14 (previously amended) The vacuum holding device according to claim 1 wherein the seal is a flat seal made of an elastic material.